

first means for raising the electric vehicle to a predetermined height;

second means to engage and lower a first EESS; and
an EESS conveyor configured to receive the first EESS is lowered onto the EESS conveyor using the second means, and wherein a second EESS is raised toward the electric vehicle using the second means

an EESS conveyor located underneath the second means, configured to receive the first EESS after the first EESS is lowered by the second means, and configured to present a second EESS to the second means, wherein the second means further for raising the second EESS to the electric vehicle.

14. The system of claim **13**, wherein the first means and second means comprise inboard and outboard lifts.

15. The system of claim **14**, wherein the first means is the inboard lift and the second means is the outboard lift.

16. A system for exchanging an electrical energy storage system (EESS) of an electric vehicle, the system comprising:

an EESS exchange station configured for positioning an electric vehicle in x and y directions;

a vehicle lift configured to raise the electric vehicle to a predetermined height; and

an EESS lift configured to raise toward the raised electric vehicle until the EESS lift is correctly positioned relative to a first EESS, to engage the first EESS, and to lower the first EESS.

17. The system of claim **16**, further comprising an EESS conveyor configured to move the first EESS from below the vehicle and to move a second EESS to below the vehicle.

18. The system of claim **16**, wherein the vehicle lift and the EESS lift comprise inboard and outboard lifts on the EESS exchange station.

19. The system of claim **18**, wherein the vehicle lift is the inboard lift and the EESS lift is the outboard lift.

20. The system of claim **16**, further comprising one or more rollers configured to guide the electric vehicle.

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